IN THE CLAIMS

Claims 1-10. (Canceled)

Claim 11. (New) An image processing method for recovering reading faults from digitized image data of an input image read from an image recording medium, the faults being due to imperfections present on the image recording medium, said method comprising the steps of:

detecting defective pixels influenced by said imperfections;

performing an interpolating process for said defective pixels to create corrected pixel values for said defective pixels;

calculating standard deviations of pixel values forming the image data, and determining granularity of said input image based on said standard deviations; and

adding a value obtained by multiplying said granularity by a random number to said corrected pixel values for each defective pixel.

Claim 12. (New) A method of claim 11, further comprising the steps of:

shifting a mask consisting of a reference number of pixels on the input image by a predetermined number of pixels at a time and calculating standard deviations of pixel values forming image data of each pixel included in said mask in each shift position; and

calculating an average of said standard deviations in said mask in each shift position; and

wherein said average is determined to be the granularity of said input image.

Claim 13. (New) A method of claim 12, wherein the step of shifting shifts said mask in a way to avoid duplication of pixels in each shift position.

Claim 14. (New) A method of claim 11, wherein the step of calculating calculates said standard deviations by excluding pixel values of the defective pixels.

Claim 15. (New) A method of claim 11, further comprising the step of generating said random number in a range of -0.5 to +0.5.

Claim 16. (New) A method of claim 11, wherein said image recording medium is a photographic film; and wherein the step of detecting detects defective pixels influenced by said imperfection present in said photographic films.

Claim 17. (New) A method of claim 16, wherein said imperfections are scratches formed on an emulsion surface of said photographic film; and wherein the step of detecting detects defective defects pixels influenced by said scratches.

Claim 18. (New) A computer-readable medium comprising computer-executable instructions for recovering reading faults from digitized image data of an input image read from an image recording medium, the faults being due to imperfections present on the image recording medium, said computer-executable instructions for:

detecting defective pixels influenced by said imperfections;

performing an interpolating process for said defective pixels to create corrected pixel values for said defective pixels;

calculating standard deviations of pixel values forming the image data, and determining granularity of said input image based on said standard deviations; and

adding a value obtained by multiplying said granularity by a random number to said corrected pixel values for each defective pixel.

Claim 19. (New) A computer-readable medium of claim 18, wherein said computer-executable instructions further comprises instructions for shifting a mask consisting of a reference number of pixels on the input image by a predetermined number of pixels at a time, and calculating standard deviations of pixel values forming image data of each pixel included in said mask in each shift position, and calculating an average of said standard deviations in said mask in each shift position; and

wherein said average is determined to be the granularity of said input image.

Claim 20. (New) An image processing apparatus for recovering reading faults produced in time of scanning photographic film due to imperfections present on the film, said apparatus comprising:

a defective pixel detecting unit for detecting defective pixels influenced by said imperfections;

an interpolating unit for performing an interpolating process for said defective pixels to create corrected pixel values for said defective pixels;

a standard deviation calculating unit for calculating standard deviations of pixel values forming image data, and determining granularity of an input image based on said standard deviations; and

a graininess adding unit for adding a value obtained by multiplying said granularity by a random number to said corrected pixel values for each defective pixel.